

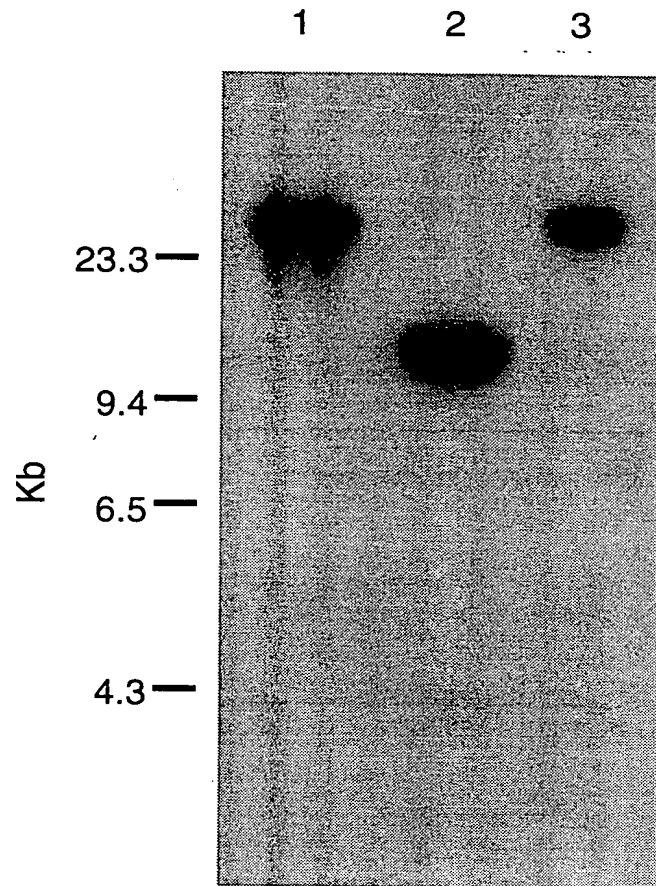
		30	40	50			
eftu_anani	1	MAPAKFERFTH	PHVNIGTIGH	/DHGKTTTLTA	AITTVLAKAS	MAKARAT--A	50
eftu_cryph	1	MAPAKFERFTH	PHVNIGTIGH	/DHGKTTTLTA	AI SATL-SY	TGSKKED--	50
eftu_cyapa	1	MAPAKFDGNN	PHVNIGTIGH	/DHGKTTTLTA	AITTALASDG	KMKARKYD--	50
eftu_pf	1	MNNKLFLRNK	QHINLSTIGH	/DHGKTTTLTA	AI SYLLNLG	LSK--KYNYS	50
eftu_ecoli	1	MSKEEFEPFH	PHVMVSTIGH	/DHGKTTTLTA	AITTVLAKTY	GAAPAFDQ-	50
		60	70	80	90	100	
eftu_anani	51	DIDSAPEEKA	RGITINTAHV	EYETGRHYA	HVDCPGHADY	VKNMITGAAG	100
eftu_cryph	51	EIDSAPEEKA	RGITINTAHV	EYETGRWYA	HVDCPGHADY	VKNMITGAAG	100
eftu_cyapa	51	EIDSAPEEKA	RGITINTAHV	EYETGRHYA	HVDCPGHADY	VKNMITGAAG	100
eftu_pf	51	DIDSAPEEKI	RGITINTTHT	EYETLTKHCA	HVDCPGHSYD	VKNMITGATQ	100
eftu_ecoli	51	-IDNAPEEKA	RGITINTSHV	EYDTETPHYA	HVDCPGHADY	VKNMITGAAG	100
		110	120	130	140	150	
eftu_anani	101	MDGAILVVSA	ADGMPMPQTRE	HILLAKQVGV	PNIVVFLNKE	DMVDDAEELLE	150
eftu_cryph	101	MDGAILVCSA	ANGMPMPQTRE	HILLAKQVGV	PNIVVFLNKA	DMVDDAEELLE	150
eftu_cyapa	101	MDGAILVVSA	ADGMPMPQTRE	HILLAKQVGV	PNMVVFLNKE	DMVDDAEELLE	150
eftu_pf	101	MDLAILVLSI	TDGMPMPQTYE	HILLTQIGLI	KNIII FLNKE	DMCDDVELID	150
eftu_ecoli	101	MDGAILVAAL	TDGMPMPQTRE	HILLGRVGV	PNIII FLNKC	DMVDDAEELLE	150
		160	170	180	190	200	
eftu_anani	151	LVELEVRELL	SSYDFPGDDI	PIVAGSALQA	LEAIGCGASG	QKQ-DNPWVD	200
eftu_cryph	151	LVELEVQELL	EKYDFPGSEI	PIVAGSALLA	LEAVANNPFI	KRG-EDKWVD	200
eftu_cyapa	151	LVELEVRELL	SKYDFPGDQI	PIVSGSALLA	LESLSNPKL	MRG-EDKWVD	200
eftu_pf	151	FIKLEVVELL	IKYNFLDNYI	HILTGSALNV	INI IQKNDDY	ELIKSNITIQ	200
eftu_ecoli	151	LVELEVRELL	SSYDFPGDDT	PIVRSALKAE	LE-----	---GDAEWEA	200
		210	220	230	240	250	
eftu_anani	201	KILKLMEEVD	AYIPTPEREV	DKPFLMAVED	VFSITGRGTV	ATGRIERGVS	250
eftu_cryph	201	TIYQIMDKVD	EYIPTPERET	DKAFMLAVED	VFSITGRGTV	ATGRIERGV	250
eftu_cyapa	201	KILALMDAVD	EYIPTPERPI	DKSFLMAIED	VFSITGRGTV	ATGRIERCAI	250
eftu_pf	201	KLNNTIQIID	NI LIIPTRKI	NDYFLMSIED	VFSITGRGTV	VIGKIEQGCI	250
eftu_ecoli	201	KILETAGFLD	SYIPESEPAI	DKPFLPIED	VFSISGRGTV	VIGRVERGII	250
		260	270	280	290	300	
eftu_anani	251	KVGETIEIVG	LRD--TRSTT	ITGVEMFQKT	LDEGLAGDNV	GILLRGIQKT	300
eftu_cryph	251	KVGETIEIVG	LRE--TRNTT	ITGLEMFQKS	LDEALAGDNV	GILVRGIQKT	300
eftu_cyapa	251	KVGETIEIVG	LKD--TKSTT	ITGLEMFQKT	LEEGMAGDNI	GILLRGIQKT	300
eftu_pf	251	NLNDELEILK	FEKSSPNLIT	ITGLEMFQKQ	LTOAQSGDNV	GILLRNIIQK	300
eftu_ecoli	251	KVGEVEEIVG	IKETQ--KST	ITGVEMFREL	LDEGRAGENV	GILLRGIKRE	300
		310	320	330	340	350	
eftu_anani	301	DIERGMVLAK	PGSITPHTKF	ESEVYVLKKE	EGGRHTPPFFP	GYPQPFYVRT	350
eftu_cryph	301	DIERGMVLAA	PGSITPHTKF	ESEVYVLTKE	EGGRHTPPFFS	GYPQPFYVRT	350
eftu_cyapa	301	DIERGMVLAK	PGSITPHTQF	ESEVYVLTKE	EGGRHTPPFFS	GYPQPFYVRT	350
eftu_pf	301	DIKGMILAT	PNKLKVYKSF	IAETVLTKE	EGGRHKPFNI	GYPQPFERT	350
eftu_ecoli	301	DIERGMVLAK	PGTIRPHTKF	ESEVYVLTKE	EGGRHTPPFFK	GYPQPFYVRT	350
		360	370	380	390	400	
eftu_anani	351	PDVGTGILSD	TADDGSALEM	VIPGDRIMKT	VELINPIAIE	DGMRFIREG	400
eftu_cryph	351	PDVGTGIIAQ	TSDDGSALEM	/MPGDRIMKT	AQLIHPIAIE	KGMRFIREG	400
eftu_cyapa	351	PDVGTGIIAQ	TADDGSALEM	/MPGDRIMKT	/SLVHPIAIE	DGMRFIREG	400
eftu_pf	351	PDVGTGILKNI	-YLNENVQKV	AI PGDKITLH	IELKHYMLT	INAKFSIREG	400
eftu_ecoli	351	PDVGTGIEL-	----PEGVEM	/MPGDNIKVV	VTLIHPIAMD	DGMRFIREG	400
		410	420	430	440	450	
eftu_anani	401	GRTIGAGVVS	KILQ.....	.....	.....	.....	450
eftu_cryph	401	GRTIGAGVVS	KILE.....	.....	.....	.....	450
eftu_cyapa	401	GRTIGAGVVS	KILK.....	.....	.....	.....	450
eftu_pf	401	GRTIGAGIIT	EIKN.....	.....	.....	.....	450
eftu_ecoli	401	GRTIGAGVVA	KVLS.....	.....	.....	.....	450

Fig. 2B

ATGAATAATAAATTATTTTTTAAGAAATAAACAACATATAAA
TTTAGGTACTATAGGGCATGTAGATCATGGAAAACTACAT
TAACAACAGCTATATCTTATTTATTAAATTTACAAGGATTA
TCAAAAAAATATAATTATTCAGATATTGATTCAGCTCCAGA
AGAAAAAATAAGAGGTATTACAATAAATACAACACATATTG
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CCAGGACATTCCGATTATATTAAAAATATGATTATAGGAGC
CACACAAATGGATATAGCAATTTTAGTAATATCTATAATAG
ATGGTATAATGCCTCAAACCTTATGAACATTTATTATTAATA
AAACAAATAGGTATAAAAAATATAATTATTTTTTTTAAATAA
AGAAGATTTATGTGATGATGTTGAATTAATAGATTTTATAA
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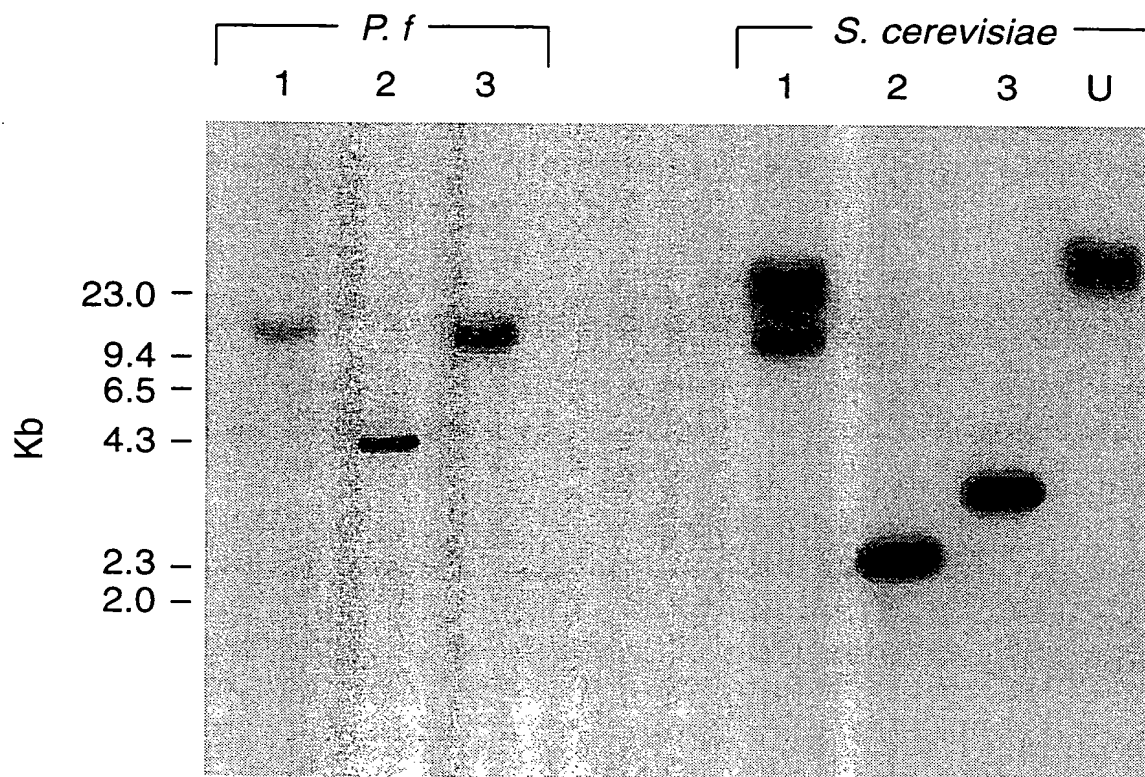
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Figure 3A



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Figure 3B



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Figure 4

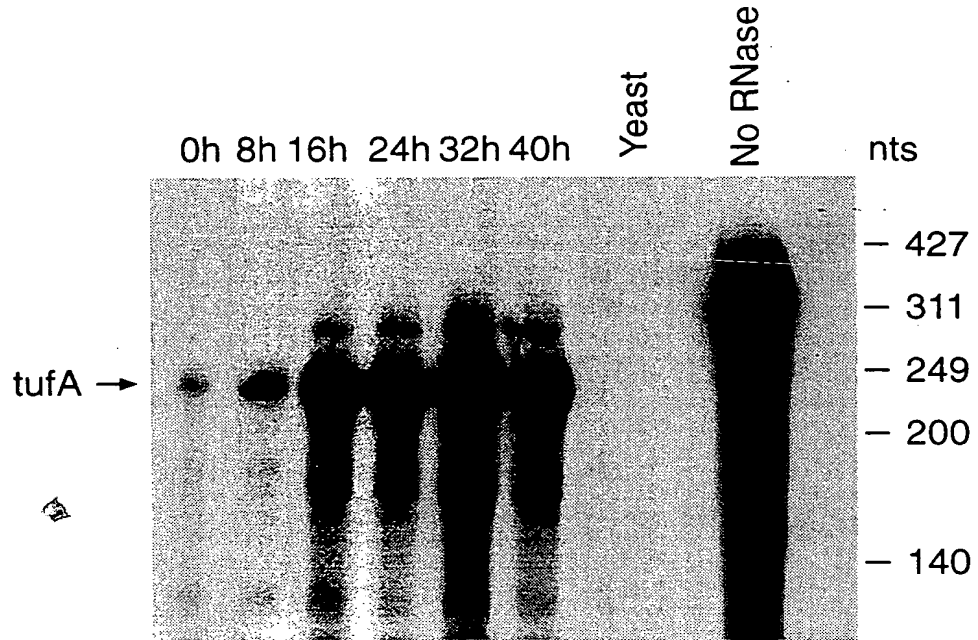


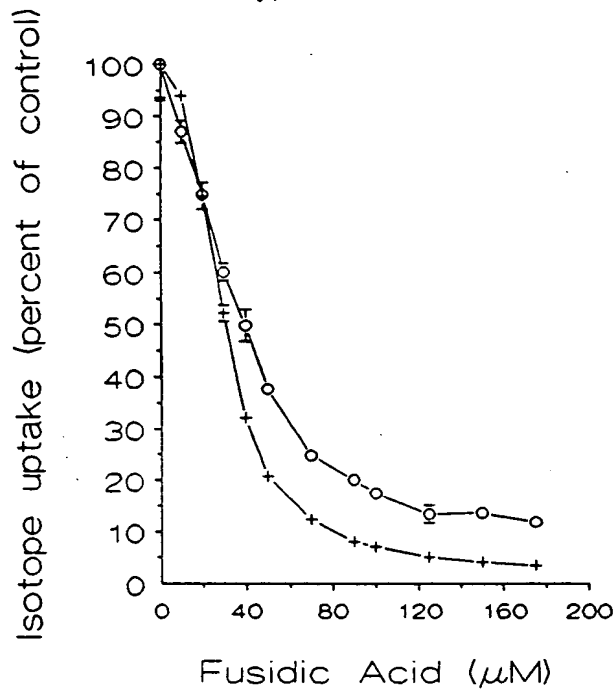
Figure 5

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(A)

Fusidic Acid
(36hr incubation)

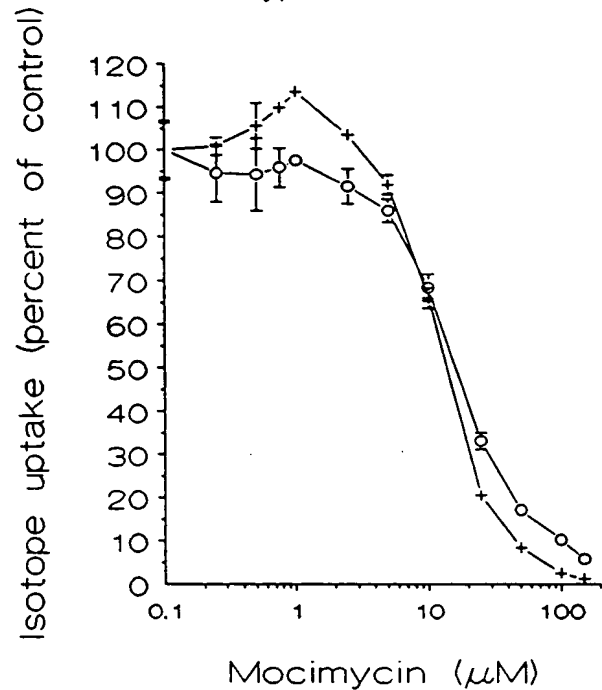
-- Hypox --o-- Ile



(B)

Mocimycin
(36hr incubation)

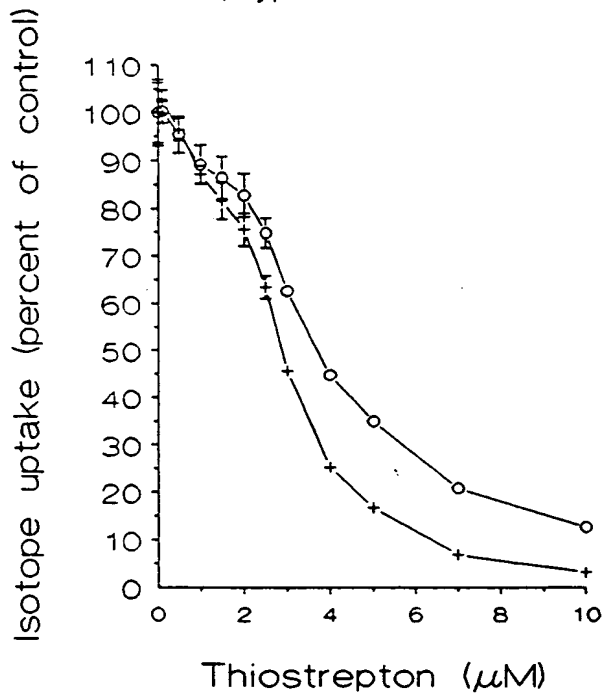
-- Hypox --o-- Ile



(C)

Thiostrepton
(36hr incubation)

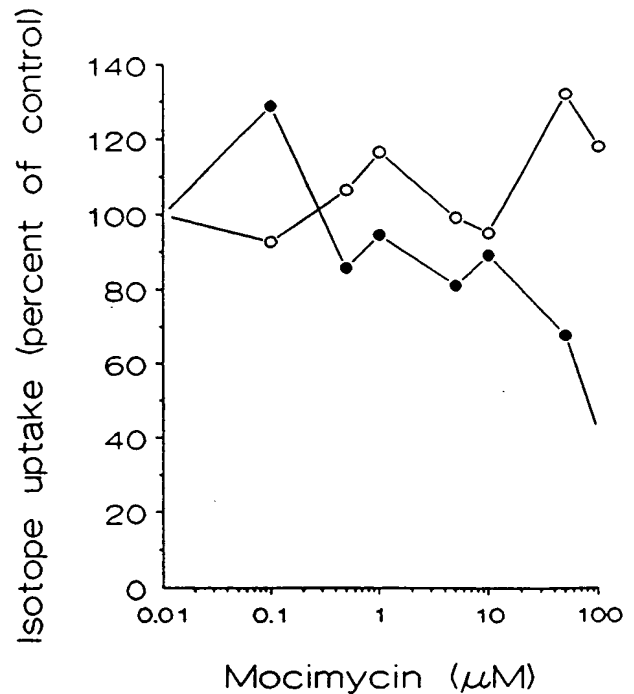
-- Hypox --o-- Ile



(D)

Mocimycin vs Myeloma
(24hr incubation)

--●-- Uridine --o-- Ile



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Figure 5 (cont)

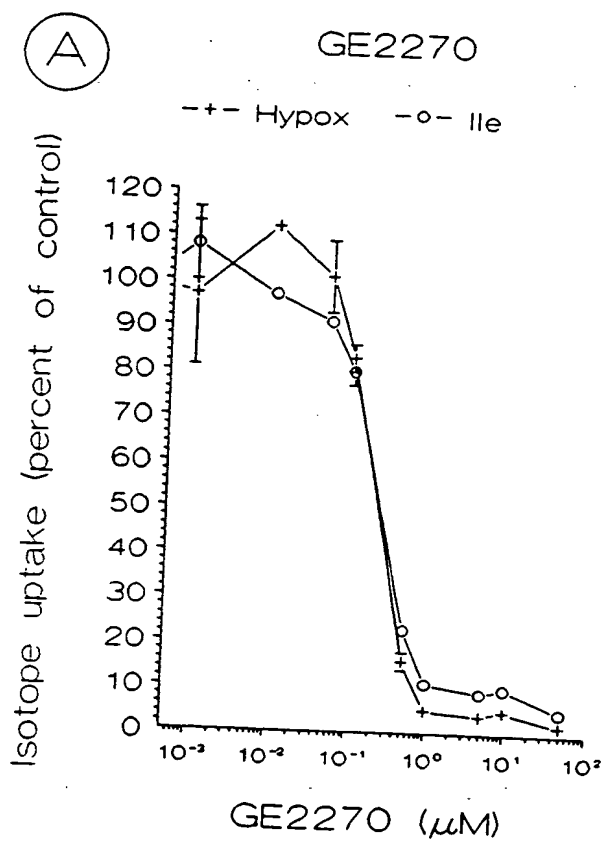


Figure 6

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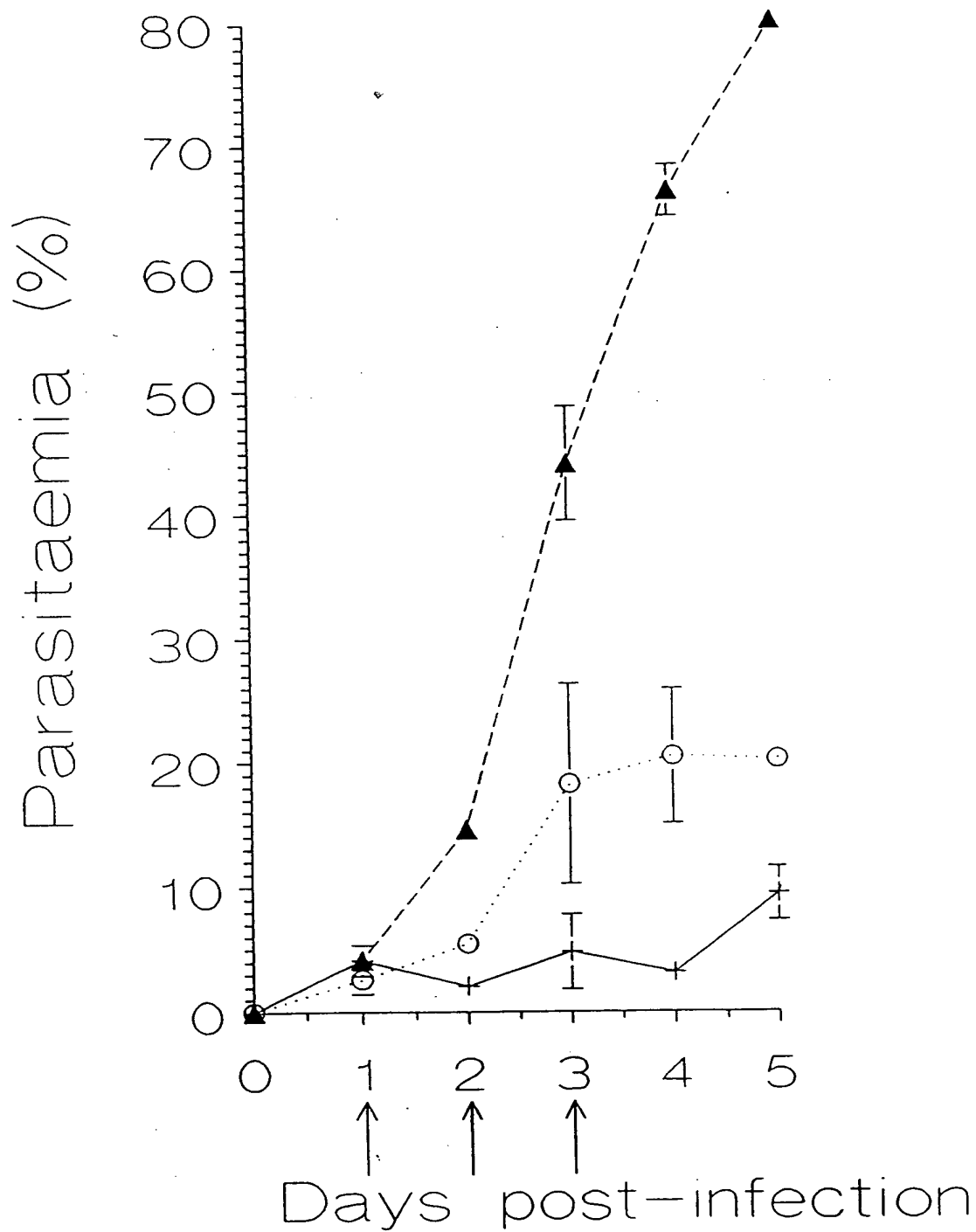
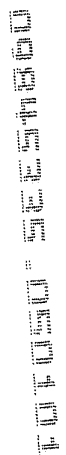
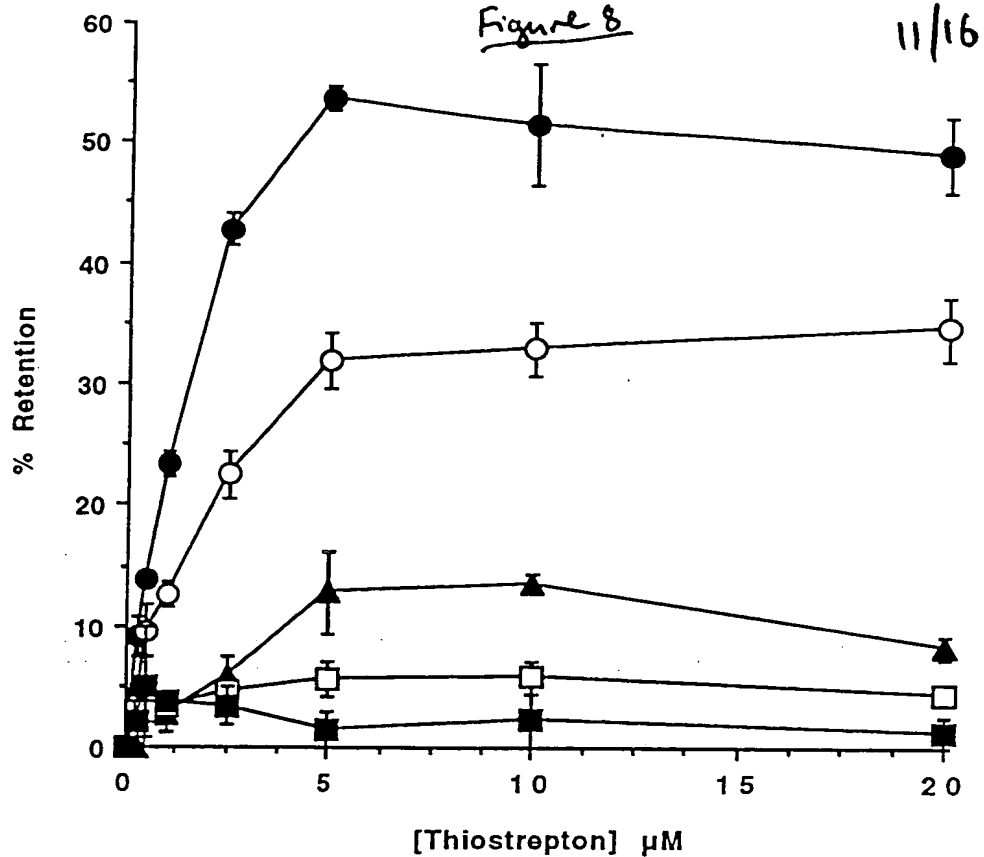


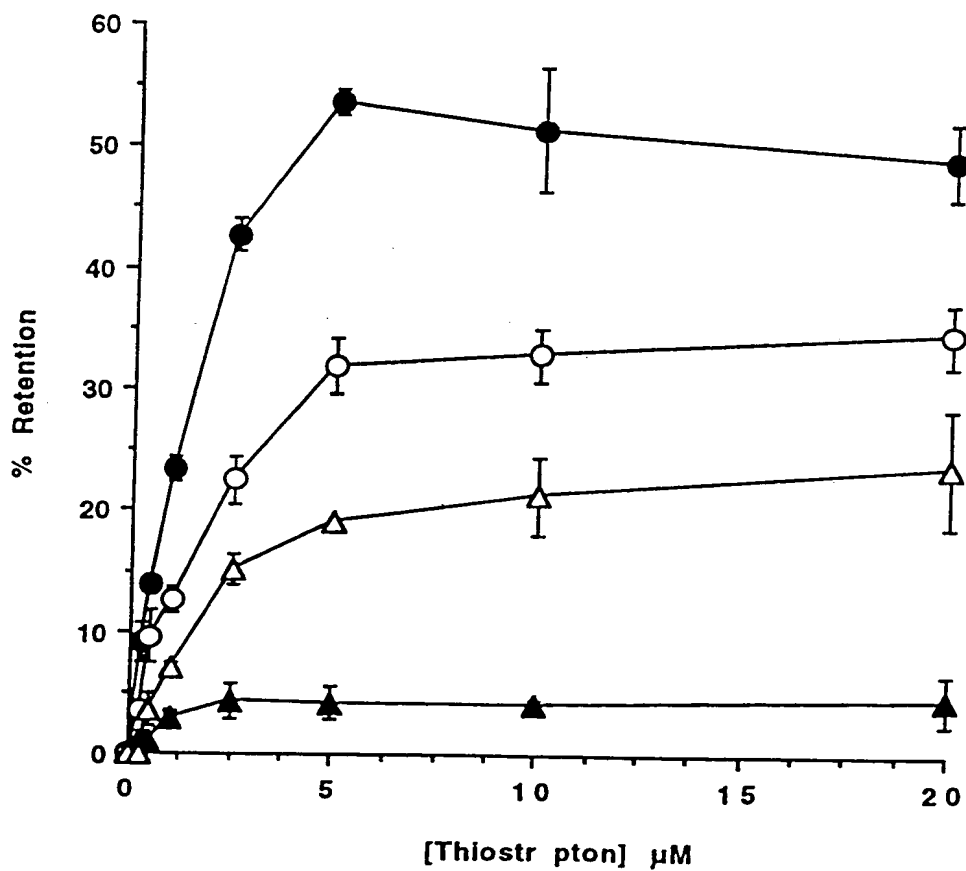
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A.

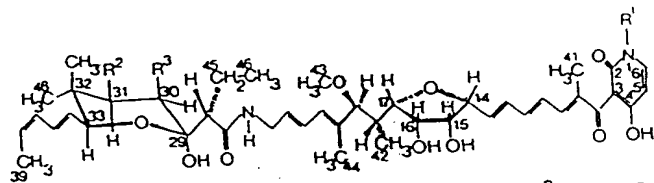


B.



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Figure 9

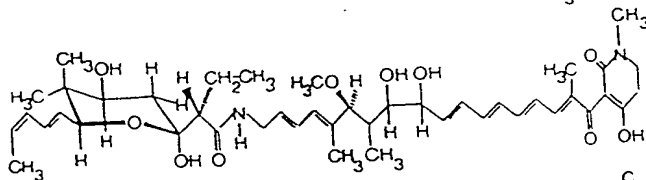
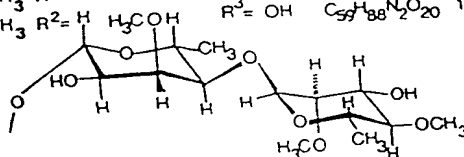


mocimycin, kirromycin
 aurodox
 heneicomycin
 efrotomycin

$R^1 = H$ $R^2 = H$
 $R^1 = CH_3$ $R^2 = H$
 $R^1 = CH_3$ $R^2 = H$
 $R^1 = CH_3$ $R^2 = H$

$R^3 = OH$ $C_{40}H_{60}N_2O_{12}$ 797
 $R^3 = OH$ $C_{44}H_{62}N_2O_{12}$ 811
 $R^3 = H$ $C_{44}H_{62}N_2O_{11}$ 795
 $R^3 = OH$ $C_{59}H_{88}N_2O_{20}$ 1,145

M.W.

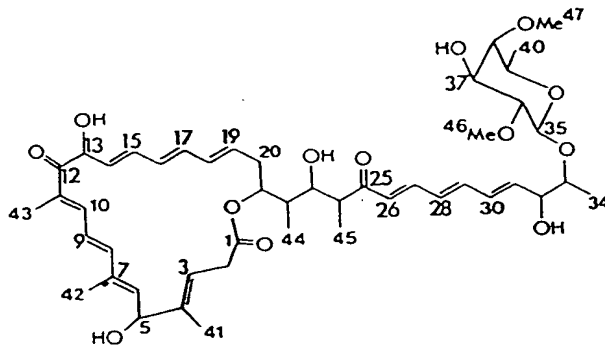


$C_{44}H_{64}N_2O_{10}$ 781

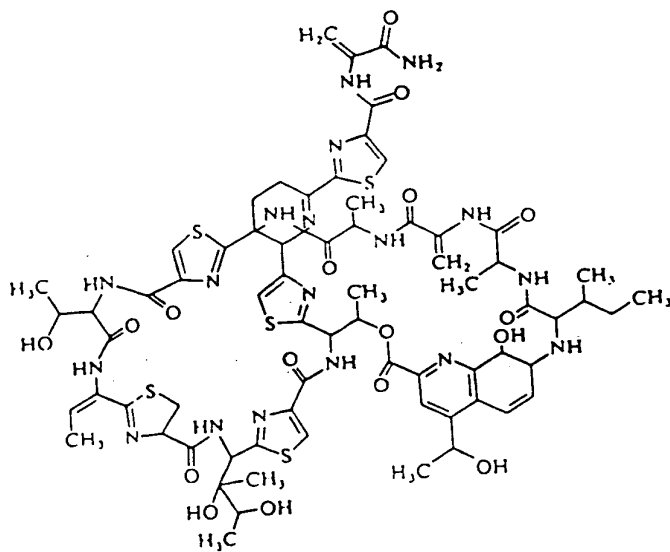
M.W.

kirrothricin

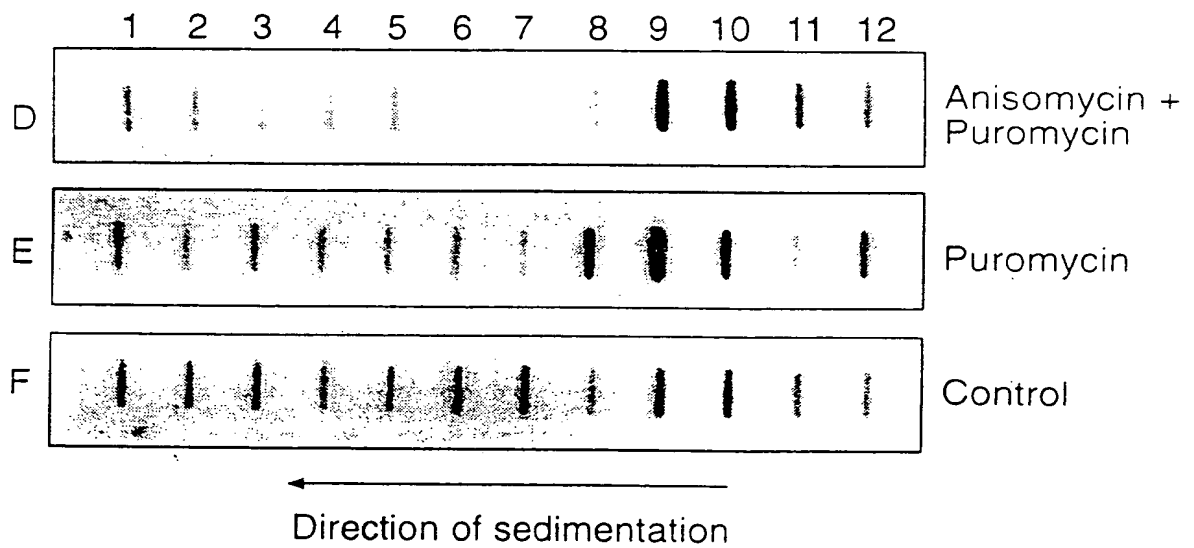
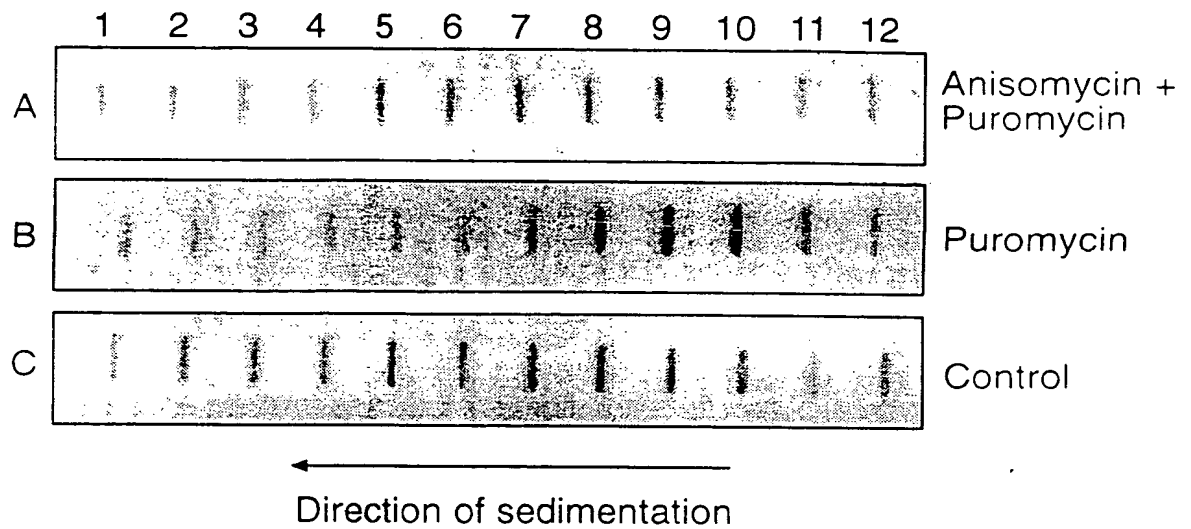
pulvomycin



Thiostrepton

[illegible]

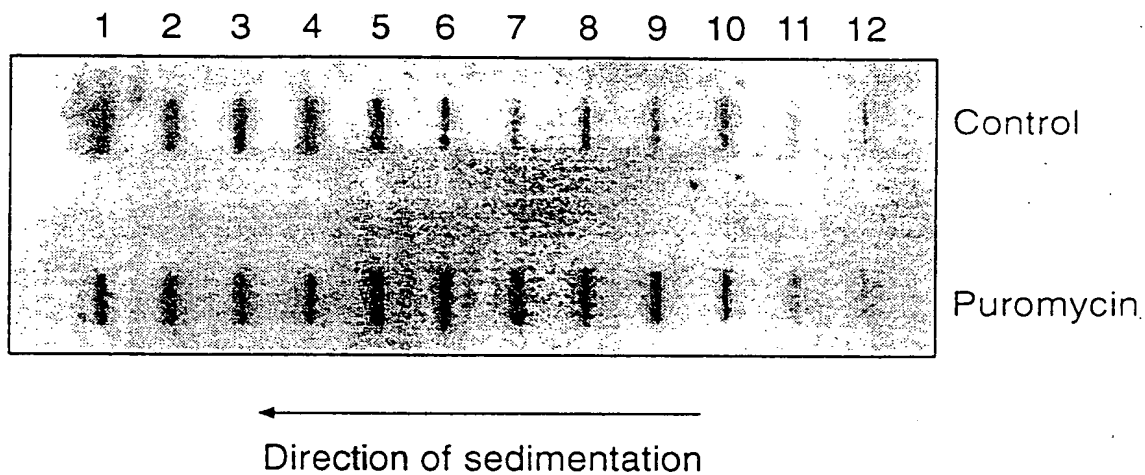
14116
Figure 11



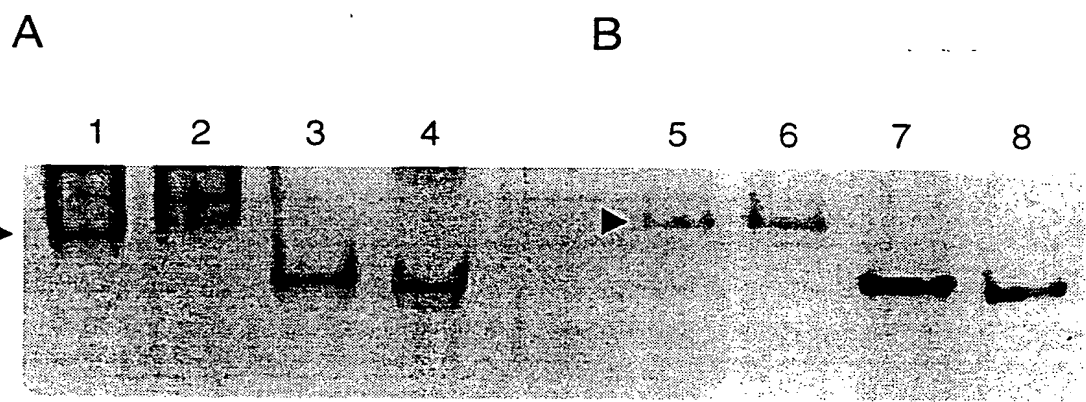
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Figure 12



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Figure 13



TOPUSO SEESTH360